

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

PARKER-HANNIFIN CORPORATION and
PARKER INTANGIBLES, LLC,

Plaintiffs,

V.

ZIPPERTUBING (JAPAN), LTD.,

Defendant.

PARKER-HANNIFIN CORPORATION and
PARKER INTANGIBLES, LLC,

Plaintiffs,

V.

SEIREN CO., LTD.,

Defendant.

C.A. No. 06-751-MPT

C.A. No. 07-104-MPT

PLAINTIFFS PARKER-HANNIFIN CORPORATION AND PARKER INTANGIBLES, LLC'S OPENING CLAIM CONSTRUCTION BRIEF

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Date: July 1, 2008

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I. NATURE AND STAGE OF PROCEEDINGS

This claim construction brief is being filed in two actions for patent infringement respectively brought by Parker-Hannifin Corporation and Parker Intangibles LLC (“Parker”) against Zippertubing (Japan), Ltd (“Zippertubing”) and Seiren Co. (“Seiren”) (collectively “the Defendants”) for infringement of U.S. Patent Nos. 6,248,393 (“the ‘393 patent”), 6,387, 523 (“the ‘523 patent”), 6,521,348 (“the ‘348 patent”), 6,716,536 (“the ‘536 patent”), and 6,777,095 (“the ‘095 patent”) (collectively “the patents-in-suit”). Of these, the ‘348 patent, the ‘536 patent, and the ‘095 patent include terms that may require construction by this Court. Copies of these patents are submitted herewith. Declaration of Steven A. Nash (“Nash Decl.”) ¶¶ 2-4, Exs. A-C.

Discovery is scheduled to close November 14, 2008. A claim construction hearing has been scheduled for August 1, 2008 at 10:30 a.m. (ZTJ D.I. 38; Seiren D.I. 42.)¹

II. SUMMARY OF THE ARGUMENT

Parker’s proposed claim constructions comport with applicable Federal Circuit law and the claim language, and are consistent with the specifications and prosecution histories for each patent-in-suit. Parker properly claimed the inventions and is entitled to the full scope of the claim language.

Virtually every claim construction dispute in this case arises from the Defendants’ need to deviate from the ordinary meaning of a claim term or to improperly read

¹ Docket Index numbers for both the Zippertubing (1:06-cv-751) and Seiren (1:07-cv-104) cases are referenced where appropriate herein. In referencing the Zippertubing D.I. number, Zippertubing has been abbreviated “ZTJ.”

unnecessary elements into the claims to avoid infringement of otherwise clear claim terms. The Defendants' efforts to rewrite the claims should be rejected.

III. STATEMENT OF FACTS

A. Technological Background Of The Claimed Invention

These are patent cases brought by Parker against Zippertubing and Seiren for infringement of the patents-in-suit. The patents belong to a common family. The four most recently issued patents are continuations of the parent '393 patent. All of the patents share similar specifications, which may be referred to as "the specification."² No new matter was added to the family as it developed. The patent family relates to the field of electromagnetic interference ("EMI") shielding.

Electronic equipment emits electromagnetic energy, which can interfere with the operation of nearby electronic equipment. '348 patent 1:24-33. EMI shielding products seek to block such electromagnetic energy from entering the equipment in which the shielding product is installed, and also to prevent escape of electromagnetic energy from that equipment which would otherwise interfere with other equipment. '348 patent 1:34-38.

Often, the electronic equipment is encased in a metal or other conductive housing which blocks the flow of the electromagnetic energy and sends it to ground. '348 patent 1:38-41. However, these housings commonly are fitted with doors or hatches to provide access to the components inside. '348 patent 1:43-45. The gap between the door and the housing provides a pathway for energy to leak in and out. '348 patent 1:47-49.

² Unless otherwise noted, references to column and line numbers (e.g., 1:2-3) in "the specification" are based on the '348 patent.

Not unlike seals for refrigerator doors, EMI shielding gaskets are placed at strategic positions within electronic equipment, such as between the housing and a door, to reduce electromagnetic leakage. ‘348 patent 1:60-64. The gaskets must have a combination of important properties to sufficiently perform this function. They must be electrically conductive, and they must have good contact with the door and housing to seal the gap. ‘348 patent 2:4-7.

In order for the gaskets to maintain good contact, they commonly include a resilient foam core that is able to compress and expand to fill the gap. The foam core typically is jacketed within a metal, metal-coated, or other conductive fabric to provide the required electrical conductivity. ‘348 patent 2:26-38.

A coating layer may be applied between the inner surface of the fabric and the outer surface of the core. ‘348 patent 3:16-18. If the gasket is produced by wrapping the fabric around the core, this coating layer may serve to glue the fabric to the core. ‘348 patent 3:18-20. If the gasket is produced by blowing a liquid foaming material into a sheath formed of the fabric, the coating layer also may serve to prevent the foaming material from bleeding through the inner side of the fabric to the outer side before the material sets up or cures. ‘348 patent 3:20-23. Such bleed through is undesirable as it may reduce the conductivity of the outer side of the fabric. *Id.*

Another important concern for manufacturers of electronic equipment is fire protection. These manufacturers increasingly desire to obtain a certain flame retardancy (“FR”) rating from a testing organization, with Underwriters Laboratories (“UL”) being one of the most popular. ‘348 patent 2:48-50. One convenient way to obtain the desired FR rating is to assemble the equipment with components that themselves have been

certified to have the desired rating. ‘348 patent 2:50-52. That is, a piece of equipment which is constructed of components of a certain FR rating will itself earn that rating.

The gold standard of fire protection is a rating of “V-0” under UL standard No. 94. Such rating correlates to the time it takes for a sample of a material to burn when placed in a vertical position. *See* section V.A. *infra*, Nash Decl. ¶ 5, Ex. D. Because equipment manufacturers desire to use components with a V-0 rating, EMI shielding gaskets certified to have that rating can command a premium in the marketplace.

Prior to the inventions described and claimed in the patents-in-suit, suppliers of EMI shielding gaskets tried to achieve V-0 ratings by heavily loading the foam core with a flame retardant material such as graphite. Gaskets produced in this way represented the state of the art at the time the claimed inventions were made.

The inventors of the patents-in-suit identified a problem with gaskets having such highly loaded foam cores. Specifically, they realized that the FR additives in the foam made the core less resilient over time. As a result, a gasket installed in the gap between the housing and the door of a piece of equipment that had to be repeatedly opened and closed tended to lose its ability to adequately seal the gap. This resulted, over time, in a decrease in the EMI shielding performance of the seal. Faced with this problem, the inventors set out to find a better way.

Eventually, they came up with the idea to load the majority of the FR additives into the coating rather than into the foam. ‘348 patent 3:35-39. Their idea, however, was not as easy as it may sound, and they were forced to overcome several obstacles before their final success. In particular, loading the coating with a high level of FR additives

changes such properties as its viscosity and bonding ability which are critical in applying the coating to the fabric.

As explained in the specification, the coating viscosity and the pressure exerted on the coating during manufacturing influence the depth to which the coating penetrates the fabric. *See, e.g.*, '348 patent 6:29 ff. If viscosity is too low or pressure is too high, the coating can penetrate all the way through the fabric and wet the opposite side with the effect of reduced electrical-conductivity. On the other hand, a viscosity that is too high can lead to other problems such as a coating which is too porous. The inventors found that only a coating composition with the proper balance of viscosity, processability, FR qualities, and adhesive characteristics worked. Through hard work and much experimentation with different formulations, the inventors devised coating compositions and manufacturing methods that met all of these requirements. The efforts of the inventors and the coatings that they found led to the inventions claimed in the patents-in-suit.

IV. BASIC PRINCIPLES OF CLAIM CONSTRUCTION

Claim construction is the process whereby a court determines what the claims of a patent mean. Claim construction is a matter of law and a threshold issue for the trial court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370, 372 (1996). The court determines the meaning of pertinent claim language to establish the scope of the patent's claims for purposes of determining infringement and validity. *Id.* at 978-79.

A. The Goal Of Claim Construction

A patent provides notice to the public of the patentee's exclusive rights, and the patentee's claims define the scope of those rights. The purpose of claim construction is to determine the meaning of the claims to a person of ordinary skill in the art at the time the application for the patent was filed. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). A person of ordinary skill is a theoretical construct who is presumed to be aware of all the pertinent prior art and who possesses all the skills, experience and education commensurate with the sophistication of the particular technology. *Endress + Hauser, Inc. v. Hawk Measurement Sys. Pty., Ltd.*, 122 F.3d 1040, 1042 (Fed. Cir. 1997); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

B. Sources of Evidence For Claim Construction

There are four principal sources of evidence that the trial court may use in construing claims: (1) the language of the claims; (2) the patent specification; (3) the prosecution history; and (4) limited extrinsic evidence to assist with understanding the background technology and the state of the art. Claim construction begins with an examination of the intrinsic evidence, i.e., items (1) – (3) above. *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Intrinsic evidence is preferred and the most useful in claim construction. Although extrinsic evidence can be used, it is less important because any change in the meaning of a claim derived from the contemporaneous extrinsic evidence may undermine the public notice function of patents. *Phillips*, 415 F.3d at 1318-19.

1. The Starting Point For Claim Construction Is The Language Of The Claims Themselves

It is a “bedrock principle” that the patent claims define the scope of the patentee’s exclusive rights. *Phillips*, 415 F.3d at 1312. Because the language used in the claims determines the scope of the invention, the proper starting point for claim construction is always the language of the asserted claim itself. *Comark Comm., Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998). Unless ambiguous or otherwise clearly modified by other intrinsic evidence, claim terms are given their ordinary and customary meaning that they would have to a person of ordinary skill in the relevant art at the time the patent application was filed. *Phillips*, 415 F.3d 1312-13. The ordinary and customary meaning provides an “objective baseline” from which to begin claim construction. *Id.* at 1313. This objective baseline is informed by both the context in which a term is used in the asserted claim, and by the specification. *Id.* at 1314.

2. Claims Must Be Read In Light Of The Specification, But The Specification Does Not Mark (Or Establish) The Boundaries Of The Claims

Although the claims are generally read in view of the specification, the specification cannot be used as a source of claim limitations that do not appear in the claims themselves. *Markman*, 52 F.3d at 980 (“The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of claims.”).

Indeed, the Federal Circuit has “repeatedly warned against confining the claims to [the disclosed] embodiments.” *Ormco Corp. v. Align Technology, Inc.*, 463 F.3d 1299, 1306 (Fed. Cir. 2006). While an inventor may use the specification to intentionally disclaim or disavow the broad scope of a claim, *Phillips*, 415 F.3d at 1316, this intention

must be clear. *Teleflex Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). Claims are not restricted to the specific embodiments or examples that appear in the specification. *Phillips*, 415 F.3d at 1323; *Electro Med. Sys., S.A. v. Cooper Life Sci., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994) (“[P]articular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments.”); *Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 908 (Fed. Cir. 2005) (“Claims of a patent may only be limited to a preferred embodiment by the express declaration of the patentee.”) (citation omitted). A corollary principle is that “a claim interpretation that excludes the preferred embodiment is rarely, if ever, correct.” *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1477 (Fed. Cir. 1998) (internal quotation marks omitted); *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996) (“[I]t is unlikely that an inventor would define the invention in a way that excluded the preferred embodiment, or that persons of skill in this field would read the specification in such a way.”).

3. Use Of Prosecution History

The prosecution history is also relevant to the claim construction analysis. When evaluating statements made during prosecution in comparison to claim language, there is a “heavy presumption” that claim terms carry their full ordinary and customary meaning. *Omega Eng’g., Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). In that regard, arguments made during prosecution will not constitute a surrender of claim scope unless the patentee has made “clear and unmistakable statements of disavowal.” *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1358 (Fed. Cir. 2003); *see also Omega Eng’g.*, 334 F.3d at 1326. Accordingly, an ambiguous disclaimer will not suffice to limit

a claim's literal scope. *SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1287 (Fed. Cir. 2005). In addition, an isolated statement or argument does not rise to the level of a disclaimer when it conflicts with other statements or arguments made during the entirety of the prosecution. *Id.* at 1289; *Omega Eng'g*, 334 F.3d at 1326-27.

4. Extrinsic Evidence Can Be Used To Assist The Court But Cannot Override The Intrinsic Record

Extrinsic evidence is any evidence not part of the claims, specification or prosecution history of the patent at issue. Extrinsic evidence, such as expert testimony and dictionaries, can be used if needed to assist in determining the meaning or scope of technical terms in the claims. *Vitronics Corp.*, 90 F.3d at 1583. Since such sources are potentially less reliable in interpreting claim scope than the intrinsic evidence, the Federal Circuit has endorsed the use of extrinsic evidence only when it serves as an aid "to help educate the court regarding the field of the invention" and to "determine what a person of ordinary skill in the art would understand claim terms to mean." *Phillips*, 415 F.3d at 1319. However, in all instances where a court accepts extrinsic evidence, it is important that it be used solely to assist with the court's understanding and not to vary or contradict the terms of the claims. *Markman*, 52 F.3d at 981. Similarly, courts should reject conclusory, unsupported assertions by experts as to the definition of a claim term or any extrinsic evidence that is clearly at odds with the claim construction mandated by the intrinsic evidence. *Phillips*, 415 F.3d at 1318-1319.

V. CONSTRUCTION OF THE CLAIMS

The parties jointly submitted a listing of disputed claim terms on June 2, 2008. (ZTJ D.I. 39; Seiren D.I. 43). The claim terms that potentially require construction are shown in bold and underlined below.

- a resilient core member **which is not V-0 rated** under Underwriter's Laboratories (UL) Standard No. 94 ('348 claim 1) *or* said core member **is not V-0 rated** ('348 claims 16, 17)
- at least the **exterior surface** being electrically-conductive ('348 claims 1, 8; '536 claim 1; '095 claim 1)
- the exterior surface defining with the interior surface a **thickness dimension** of the fabric member therebetween ('348 claims 1, 8; '536 claim 1; '095 claim 1)
- and a flame retardant layer **coating at least a portion of the interior surface** of said fabric member ('348 claims 1, 8; '536 claim 1; '095 claim 1)
- said flame retardant layer **being/is effective to afford said gasket a flame class rating of V-0** under Underwriters Laboratories (UL) Standard No. 94 ('348 claims 1, 15; '535 claim 8; '095 claim 8)
- **penetrating into said fabric member to a depth which is less than the thickness dimension of said fabric member such that the exterior surface of said fabric member remains electrically conductive** ('348 claims 1, 8; '536 claim 1)
- said flame retardant layer comprising **between about 30-50% by weight** of one or more flame retardant additives ('348 claim 8)
- **at least about 30% by weight** ('536 claim 1)
- **at least about 50% by dry weight** ('095 claim 1)

Parker contends that most of the contested terms should be accorded their ordinary meaning, consistent with the specification. This meaning is confirmed by the relevant intrinsic evidence (specification and claims), that the prosecution history places no clear and unambiguous limits on the ordinary meaning³, and that there is no need to rely on extrinsic evidence to rewrite those terms. By contrast, the Defendants apparently

³ As discussed below, the prosecution history of the '095 patent provides guidance as to the meaning of "at least about 50% by dry weight" in '095 claim 1.

seek to limit the claims by urging the Court to narrowly rewrite the claims to contradict the plain meaning dictated by the intrinsic evidence.

A. “which is not V-0 rated”

Parker’s Proposed Construction: “which would not be accorded a V-0 rating under UL Standard No. 94 were the core member to be submitted to UL for testing.”

A V-0 rating is a material classification awarded by UL. To be awarded the rating the material must exhibit certain characteristics under specified testing conditions set forth in UL Standard No. 94. For example, the material must burn for less than 10 seconds while supported in a vertical orientation after being exposed to a flame for a fixed amount of time. Nash Decl. ¶ 5, Ex. D.⁴ V-0 is the highest rating a material can achieve for flame retardancy under the Standard. Materials that are less flame retardant can be awarded a V-1 or V-2 rating.

‘348 claim 1 recites “a resilient core member *which is not V-0 rated* under Underwriter’s Laboratories (UL) Standard No. 94,” and later that “said core member [is] formed of a foamed elastomeric material.” Thus, the phrase “which is not V-0 rated” in the claims describes a foam core member. One of ordinary skill in the art would have understood, at the time the application leading to the ‘348 patent was filed, that a foam core member could have been submitted to UL for testing under UL Standard No. 94.⁵ See Declaration of William Flanders (“Flanders Decl.”) ¶ 4. In fact, Rogers Corporation

⁴ Exhibit D is a copy of UL Standard No. 94. It is being filed under seal in accordance with use restrictions imposed by UL.

⁵ In a letter dated May 16, 2008, Zippertubing indicated a mistaken belief that UL does not offer a V-0 rating for foam. Nash Decl. ¶ 6, Ex. E.

of Rogers, Connecticut commercially markets a V-0 rated foam under the mark BISCO® HT-840 for use in gaskets. Nash Decl. ¶ 7, Ex. F.

Although flammability testing is possible under UL Standard No. 94, it is not necessary to carry out the inventions claimed in the patents-in-suit. Flanders Decl. ¶ 6. In fact, the specification does not cite a single example of a foam core being submitted to UL for testing.

One of ordinary skill in the art would have recognized that most foams would not be accorded a V-0 rating if submitted for testing, and that unless a foam was specially loaded with flame retardant additives, there would be no reason to actually submit the foam for testing. Flanders Decl. ¶¶ 7-8. Accordingly, the inquiry is not whether or not a foam core actually has been submitted to UL for testing, or whether or not it has been evaluated by UL. Rather, a foam core meets the claim recitation if it would not be accorded a V-0 rating were it submitted to UL for testing.

Parker's construction is consistent with the specification of the '348 patent. The specification describes that "[c]ore member 52 therefore may be formed of a foamed elastomeric thermoplastic such as a polyethylene, polypropylene, polypropylene-EPDM blend, butadiene, styrene-butadiene, nitrile, chlorosulfonate, or a foamed neoprene, urethane, or silicone." '348 patent 7:49-53. The specification further explains that these materials are highly flammable: "it has long been recognized that foamed polymeric materials are flammable and, in certain circumstances, may present a fire hazard. Owing to their cellular structure, high organic content, and surface area, most foam materials are subject to relatively rapid decomposition upon exposure to fire or high temperatures." '348 patent 2:64-3:2. Thus, at the time the application for the '348 patent was filed, it

was well known that these materials and a foam core made from them would be flammable and ineligible for a V-0 rating. Accordingly, one of skill in the art would have no motivation to actually submit the materials to UL for testing under Standard No. 94. *See* Flanders Decl. ¶ 8. However, if these materials were submitted to UL for testing, they would not be accorded a V-0 rating unless specially modified to achieve flame retardancy. *Id.* at 7.

Because one skilled in the art would recognize the futility of submitting the common foams recited in the '348 patent ('348 patent 7:49-53) to UL for testing under Standard No. 94, the skilled artisan would understand the claim term "which is not V-0 rated" to mean that the foam core would not be accorded a V-0 rating under UL Standard No. 94 were the core member to be submitted to UL for testing. Consistent with the commonly accepted wisdom in the art and the understanding of one of ordinary skill, the specification does not provide any examples or indication that such a foam actually be submitted for testing. Rather, it is understood that the claim term describes the inherent nature of the material, as opposed to an actual failure to achieve a V-0 rating.

Accordingly, Parker's proposal that "which is not V-0 rated" be construed to mean "which would not be accorded a V-0 rating under UL Standard No. 94 were the core member to be submitted to UL for testing" is consistent with the specification and the understanding of one of ordinary skill in the art with respect to foam core materials.

B. "exterior surface"

As a preliminary matter, Parker does not believe that the term "exterior surface" requires construction by this Court. However, Parker submits its proposed construction because Zipperubing and Seiren have requested that the term be construed.

Parker's Proposed Construction: "The exteriorly facing surface of the referenced article."

The ordinary and customary meaning of "exterior surface", as in outer or outward surface, is consistent with the way in which the term is used in the patents, and is controlling in this case. The patents indicate that the terms "interior" and "exterior" respectively indicate the directions toward and away from the center of the referenced element. '348 patent 4:64-66. The claims in which the term "exterior surface" appears are directed to gaskets, in which an electrically conductive fabric member surrounds the foam core member. The fabric member includes an interior surface facing the outer surface of the core member, and an oppositely-facing exterior surface. Thus, the "exterior surface" should be construed as the surface of the fabric member facing exteriorly.

C. "thickness dimension"

Parker's proposed construction: "The distance between the exterior surface and the interior surface of the fabric member."

The claims themselves define the term "thickness dimension." Specifically, the claims recite that the fabric member has an interior surface and an exterior surface, "the exterior surface defining with the interior surface a thickness dimension of the fabric member therebetween." *See, e.g.*, '348 patent claim 1, 10:63-65. Accordingly, the thickness dimension is simply the distance between the exterior surface and interior surface of the fabric member. *See Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1355 (Fed. Cir. 2004) ("As always, the claim language itself governs the meaning of the claim."); *Phillips*, 415 F.3d 1312-13 (Unless ambiguous or otherwise clearly

modified by other intrinsic evidence, claim terms are given their ordinary and customary meaning.)

The ordinary meaning of the term “thickness dimension”, as used in the claims, is consistent with its use in the specification. For example, the patents describe the fabric member as having “an electrically-conductive first side, 16, and a conductive or non-conductive second side, 18, defining a thickness dimension.” *See, e.g.*, ‘348 patent 5:42-44. The patents further provide a specific example, “referenced at ‘t₁’ in the cross-sectional view of FIG. 2, which may vary from about 2-4 mils (0.05-0.10 mm).” *Id.* at 5:44-46. While illustrative, the example is not read into the language of the claims. *See Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1370 (Fed. Cir. 2008) (“this court will not at any time import limitations from the specification into the claims.”) (citation omitted).

Given the explicit and clear definition provided in the claims, “the exterior surface defining with the interior surface a thickness dimension of the fabric member therebetween,” and the consistency of that definition with the specification and the ordinary and customary meaning, the construction proposed by Parker controls. *See Tip Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 2008 U.S. App. LEXIS 12757, at *7-*15 (Fed. Cir. June 18, 2008) (where the claim itself contains a precise definition of the term that is consistent with the specification, the district court is justified in adopting it.) Thus, the term “thickness dimension” should be construed as “the distance between the exterior surface and the interior surface of the fabric member.”

D. “coating at least a portion of the interior surface”

Parker’s proposed construction: “A layer having flame retardant properties covers at least a portion or the entirety of the interior surface of the fabric member.”

The disputed claim element describes the relationship between the flame retardant layer and the fabric: “a flame retardant layer coating at least a portion of the interior surface of said fabric member.” *See, e.g.*, ‘348 claim 1.

Parker contends that the plain and ordinary meaning of the claim term controls. The parties appear to agree that the phrase of the disputed claim term “at least a portion” means that the layer can be applied to a portion or the entirety of the interior surface. The parties disagree on whether or not the word “coating” includes a layer applied to the fabric over another layer, i.e., a second or subsequent layer applied over a first layer. In other words, is the claim term limited to layers that are directly applied to the interior surface, or open to subsequently applied layers? Parker contends that the word “coating,” and thus the claim term, includes subsequent layers.

The ordinary and customary meaning of the term “coating” includes a second or subsequent layer of material on any given article, regardless of how many layers have been previously coated thereon. A practical example of such subsequent coatings occurs any time one desires to repaint a room. No matter how many prior coats of paint are already on the walls, the new paint is still coating them. Under the construction offered by Seiren and Zippertubing, only the first layer of paint (or perhaps only the primer) would be “coating” the walls. This latter construction is contrary to the ordinary and customary meaning of the word “coating.”

Should there be any doubt, the verb to “coat” is defined as “to cover or spread over with a layer of any substance; as, to coat a ceiling with paint.” Nash Decl. ¶ 8, Ex. G. There is no requirement that the act of coating involve direct contact between the coating substance and the thing being coated. Thus, the ordinary meaning of the term “coating” is simply to cover, regardless of the number of intervening layers between the coating substance and the object it coats.

The term “coating” is used in the specification consistent with this ordinary and customary meaning. Particularly,

In having a layer of a flame retardant coating applied to one side of an electrically-conductive, generally porous fabric, the material of the invention affords UL94 V-0 protection when used as a jacketing in a fabric-over-foam gasket construction. Advantageously, as the flame retardant layer may be wet coated on the fabric without appreciable bleed through, a relatively thin, i.e., 2-4 mil (0.05-0.10 mm), coating layer may be provided on one fabric side without compromising the electrical surface conductivity of the other side.

‘348 patent 3:39-44. Additionally, “Returning to FIGS. 1 and 2, coating member 14 preferably is formed from a curable layer of a fluent, flame retardant resin or other composition which is wet coated onto the second side 18 of fabric member 12.” ‘348 patent 6:35-38.

There is no requirement in the specification or claims that the flame retardant layer coating the interior surface be directly applied to the surface. Rather, the flame retardant layer can be applied directly to the surface or on top of one or more intervening layers—similar to “coat[ing] a ceiling with paint.” Thus, the term “coating at least a portion of the interior surface” should be construed to mean “covers at least a portion or the entirety of the interior surface of the fabric member.”

E. “being/is effective to afford said gasket a flame class rating of V-0”

Parker’s proposed construction: “A layer having flame retardant properties provides the overall gasket, in which the layer is found, with flame retardant properties that are sufficient so that the gasket has been accorded a V-0 rating by UL after testing for flammability under UL Standard No. 94.”

The issue in dispute with respect to the claim element “being effective to afford said gasket a flame class rating of V-0” is whether the gasket must actually be tested under UL Standard No. 94. Based on the specification, one of ordinary skill in the art would understand that the gasket must actually be tested in accordance with the Standard and accorded a V-0 rating. Particularly, the patents explicitly state what it means for the flame retardant layer to be “effective to afford said gasket a flame class rating of V-0:”

Samples also were provided, as jacketed over a polyurethane foam core in an EMI shielding gasket construction, for flame testing by Underwriters Laboratories, Inc., Melville, N.Y. A flame class rating of V-0 under UL94 was assigned at a minimum thickness of 1.0 mm. The gasket construction therefore was found to be compliant with the applicable UL requirements, and was approved to bear the “UL” certification mark.

The foregoing results confirm that the EMI shielding material of the present invention affords UL94 V-0 protection when used as a jacketing in a fabric-over-foam gasket construction . . . Such a thin coating layer, while being sufficient to provide UL94 V-0 protection . . .

‘348 patent 10:20-39.

The patents further emphasize the importance of actual testing and V-0 designation under UL Standard No. 94 (as opposed to the mere capability of being rated) by way of background:

Many electronic devices, including PC's and communication equipment, must not only comply with certain FCC requirements, but also must meet [and] be approved under certain Underwriter's Laboratories (UL) standards for flame retardancy. In this regard, if each of the

individual components within an electronic device is UL approved, then the device itself does not require separate approval. Ensuring UL approval for each component therefore reduces the cost of compliance for the manufacturer, and ultimately may result in cheaper goods for the consumer. For EMI shielding gaskets, however, such gaskets must be made flame retardant, i.e., achieving a rating of V-0 under UL Std. No. 94, “Tests for Flammability of Plastic Materials for Parts in Devices and Appliances” (1991), without compromising the electrical conductivity necessary for meeting EMI shielding requirements.

‘348 patent 2:46-61.

The above-reproduced passage explains that “if each of the individual components within an electronic device *is UL approved*, then the device itself does not require separate approval.” (emphasis added) Thus, it is not merely the inherent flame retardant characteristics of an article, but also the actual UL V-0 approval that provides a gasket with commercial value. In this respect, the manufacturer of electronic equipment would prefer a gasket that has been approved by UL under Standard No. 94 over a non-approved gasket that is merely capable of approval. By using components that have actually been accorded a V-0 rating by UL, as opposed to those capable of earning the rating, the equipment manufacturer can avoid expensive testing and ultimately offer more attractively priced equipment.

One of ordinary skill in the art reading the claim element “being effective to afford said gasket a flame class rating of V-0” would look to the specification and understand the importance of actual V-0 approval. Further, upon reading in the specification that the gaskets of the invention have, in fact, been tested by UL and approved to bear the UL certification mark, the skilled artisan would understand that the claim element means that “a layer having flame retardant properties provides the overall gasket, in which the layer is found, with flame retardant properties that are sufficient so

that the gasket has been accorded a V-0 rating by UL after testing for flammability under UL Standard No. 94.”⁶

F. “penetrating into said fabric member to a depth which is less than the thickness dimension of said fabric member such that the exterior surface of said fabric member remains electrically conductive”

Parker’s proposed construction: “entering into the fabric to a depth which is between the interior surface and the exterior surface such that the electrical conductivity of the exterior surface is not appreciably affected.”

The above claim element describes the manner in which the flame retardant layer penetrates the fabric member. As explained above, a purpose of an EMI shielding gasket is to reduce electromagnetic leakage. The exterior surface of the fabric is electrically conductive to help achieve this goal. According to the claim element, the flame retardant layer penetrates into the “fabric member to a depth which is less than the thickness dimension of said fabric member such that the exterior surface of said fabric member remains electrically conductive.”

Consistent with the ordinary and customary meaning of the language of the claim element, the specification describes that “[a]dvantageously, as the flame retardant layer may be wet coated on the fabric without appreciable bleed through, a . . . coating layer may be provided on one fabric side without compromising the electrical surface

⁶ Parker notes that its proposed construction of “being effective to afford said gasket a flame class rating of V-0” requires actual testing and certification, while Parker’s proposed construction of “which is not V-0 rated” (section V.A., *supra*) requires no actual testing. The two positions are both consistent with the rules of claim construction. While the specification makes clear that actual testing and V-0 certification of the overall gasket is important, there is no such importance with respect to actual testing and failure of certification with respect to the foam core “which is not V-0 rated.” Rather, in the case of the foam core, the inherent characteristic that it would not be accorded a V-0 rating were it submitted for testing is of primary significance.

conductivity of the other side.” ‘348 patent 3:39-44. “In this regard, when the layer is cured to form the flame retardant surface coating member 14 on the second side 18 of fabric member 12, the first side 16 thereof remains electrically-conductive.” ‘348 patent 6:44-47.

The passages in the specification are consistent with the ordinary meaning of “penetrating into said fabric member to a depth which is less than the thickness dimension of said fabric member such that the exterior surface of said fabric member remains electrically conductive.” Accordingly, the specification would guide one of ordinary skill in the art to understand that the element carries that ordinary meaning. There is no need to search extrinsic evidence or to import additional limitations from the specification into the claims.

Applying the ordinary meaning of the language of the claim element, one skilled in the art would understand that it means “entering into the fabric to a depth which is between the interior surface and the exterior surface such that the electrical conductivity of the exterior surface is not appreciably affected.”

G. “between about 30-50% by weight”

Zippertubing and Seiren have requested construction of the above phrase in the claim element “said flame retardant layer comprising between about 30-50% by weight of one or more flame retardant additives.” Parker does not believe that the element requires construction. Parker nonetheless provides its proposed construction for the sake of completeness. Neither Zippertubing nor Seiren have offered an alternative construction.

Parker's proposed construction: "The flame retardant layer when applied contains between about 30% and about 50% of flame retardant additives."

The element "between about 30-50% by weight" appears in claim 8 of the '348 patent, and describes the amount of flame retardant additives in the flame retardant layer. In particular, the accompanying words of the claim are, "said flame retardant layer comprising between about 30-50% by weight of one or more flame retardant additives." The issue is whether the flame retardant layer has the recited FR additive content at the time it is applied, or after it is cured. One of ordinary skill in the art, viewing the patent as a whole would understand, without any doubt or ambiguity, that the claim means that the flame retardant layer *when applied* contains between about 30% and about 50% of flame retardant additives. Particularly, the specification describes that the flame retardant layer can be formed from an aqueous emulsion:

Returning to FIGS. 1 and 2, coating member 14 preferably is formed from a curable layer of a fluent, flame retardant resin or other composition which is wet coated onto the second side 18 of fabric member 12.

* * *

The flame retardant composition preferably is formulated as an aqueous emulsion of an acrylic latex emulsion which is adjusted to a total solids of about 60% and a Brookfield viscosity (#5 spindle, 4 speed) of between about 40,000-60,000 cps, at a density of about 10 lbs per gallon (1.8 g/cm.sup.3). Flame retardancy may be imparted by loading the emulsion with between about 30-50% by weight of one or more conventional flame retardant additives such as aluminum hydrate, antimony trioxide, phosphate esters, or halogenated compounds such as polybrominated diphenyl oxides.

'348 patent 6:35-38; 6:60-68.

The emulsion is applied to the fabric member as a liquid, and then cured to form a dried film. *See* '348 patent 8:61-62 (emulsion is coated and cured); '348 patent 9:13-34

(describing application of the liquid coating); ‘348 patent 9:34-42 (describing curing of the applied coating).

Based on the above passages, one of ordinary skill in the art would understand that “about 30-50% by weight” refers to the amount of flame retardant additive in the emulsion, *i.e.*, the form of the coating at the time it is applied. Thus, the claim element “said flame retardant layer comprising between about 30-50% by weight of one or more flame retardant additives” should be construed as “the flame retardant layer when applied contains between about 30% and about 50% of flame retardant additives.”

H. “at least about 30% by weight”

Similar to the element discussed immediately above, Zippertubing and Seiren have requested construction of the phrase “at least about 30% by weight” Parker does not believe that the element requires construction, but provides its proposed construction for the sake of completeness. Neither Zippertubing nor Seiren have offered an alternative construction.

Parker’s proposed construction: “The flame retardant layer when applied contains at least about 30% of flame retardant additives.”

The term “at least about 30% by weight” appears in the claim language “said flame retardant layer comprising at least about 30% by weight of one or more flame retardant additives” of claim 1 of the ‘536 patent. The issue with respect to this claim element is the same as that discussed above in connection with the element of ‘348 claim 8 “between about 30-50% by weight”. Similar to the analogous element in ‘348 claim 8, the element “at least about 30% by weight” refers to the amount of FR additive in the flame retardant layer. The same passages in the specification as discussed above in

section V.G. support and illustrate that “at least about 30%” refers to the amount of flame retardant additive at the time it is applied.⁷ For the reasons set forth in section V.G., the claim element “said flame retardant layer comprising at least about 30% by weight of one or more flame retardant additives” should be construed as “the flame retardant layer when applied contains at least about 30% of flame retardant additives.”

I. “at least about 50% by dry weight”

Similar to the elements discussed above in sections V.G. and V.H., Zippertubing and Seiren have requested construction of the phrase “at least about 50% by dry weight.” Parker does not believe that the element requires construction, but provides its proposed construction for the sake of completeness. Neither Zippertubing nor Seiren have offered an alternative construction.

Parker’s proposed construction: “The flame retardant layer when dried or otherwise hardened contains at least about 50% of flame retardant additives.”

The language “said flame retardant layer comprising at least about 50% by dry weight of one or more flame retardant additives” appears in claim 1 of the ‘095 patent. One skilled in the art would immediately appreciate the distinction between “at least about 50% by dry weight” (emphasis added) and the “by weight” elements of ‘348 claim 8 and ‘536 claim 1, which mean “when applied” or “wet weight” in the case of an applied liquid. The skilled artisan would understand that in the case of a cured emulsion layer, where the layer is applied as a liquid and then dried or otherwise hardened to form a solid coating, water (or other solvent) is lost during the curing process. Because the total weight of the layer decreases while the amount of solids remains roughly constant, the

⁷ The passages discussed in section V.G. *supra* from the ‘348 patent correspond with ‘536 patent 6:37-40 and 6:62-7:2.

amount of the remaining solids increases as a percentage of the total weight of the layer. This forms the basis for the difference between “by weight” when applied, and “by dry weight.”

As would be immediately recognized by one of ordinary skill in the art, the passages cited above in section V.G., which describe “loading the emulsion with between about 30-50% by weight of one or more conventional flame retardant additives” (‘348 patent 6:60-68)⁸, indicate that the amount of flame retardant additives by dry weight would be at least about 50%. This is explained in the intrinsic record in a Preliminary Amendment submitted in connection with the application that led to the ‘095 patent:

In this regard, the specification describes the 30-50% range is based on the total weight of the emulsion. With the emulsion having a total solids content of about 60%, such 30-50% range therefore corresponds to a dry weight basis in the dried or otherwise cured film of the layer, of between about 50-83%. For example, at 60% total solids, 100 parts by total weight of the emulsion contains 30-50 parts of the one or more flame retardant additives, and 60 parts by weight solids. On a solid or dry basis, i.e., with the 40 parts water having been removed, the total weight of the layer is now 60 parts with between about 30-50 parts thereof, i.e., about 50-83%, being the additive composition or concentration.

Nash Decl. ¶ 9, Ex. H., p. 4.

One skilled in the art, reading the claims and specification of the ‘095 patent would understand that the phrase “at least about 50% by dry weight” means that the flame retardant layer when dried or otherwise hardened contains at least about 50% of flame retardant additives. In the event that any doubt remains, the Court need only look

⁸ The passages from the ‘348 patent referenced in section V.G. corresponds with ‘095 patent 6:65-7:11. As indicated above, the passages convey to one of skill in the art that the flame retardant layer when applied contains between about 30% and about 50% of flame retardant additives.

to the prosecution history of the '095 patent, in which the claim element is explicitly explained. In accordance with all of the intrinsic evidence of record, the Court should construe the element "said flame retardant layer comprising at least about 50% by dry weight of one or more flame retardant additives" as proposed by Parker, i.e., "the flame retardant layer when dried or otherwise hardened contains at least about 50% of flame retardant additives."

VI. CONCLUSION

For the foregoing reasons, Parker respectfully submits that the claim constructions proposed above should be adopted by the Court.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on July 1, 2008, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to counsel of record on the Court's CM/ECF registrants for this case. I further certify that on July 1, 2008, I caused a copy of the foregoing document to be served upon the following in the manner indicated:

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